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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/825,667 | 04/16/2004 | Koji Hiramatsu | D-1595 | 8507 |

7590

02/28/2006

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EXAMINER

HAUGLAND, SCOTT J

ART UNIT

PAPER NUMBER

3654

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,667

Applicant(s)

HIRAMATSU, KOJI

Examiner

Scott Haugland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the energy-absorption members having the different shapes recited in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiramatsu et al (U.S. Pub. No. 2002/0070307).

Hiramatsu et al discloses a seat belt retractor comprising: a spool 4 for winding and unwinding the seat belt, a locking mechanism 6 having a locking member 14 attached to the spool to be rotatable therewith in a normal state and capable of locking the spool in an emergency state, a torsion bar 7 disposed between the spool and the locking member for absorbing kinetic energy of a passenger when the spool rotates in a direction that the seat belt is withdrawn relative to the locking member in an emergency situation, a stopper 16 screwed in a shaft of the locking member to be movable in an axial direction along the shaft of the locking member when the spool rotates relative to the locking member, the stopper locking the spool when it engages the locking member, and an energy-absorption member 20 disposed on one of the stopper and the locking member and situated between the stopper and the locking member for shear-deformation when the stopper moves in the axial direction along the shaft of the locking member. Note protrusions 20i, 20j of the energy-absorption member that connect the energy-absorption member to the threaded portion 15 of the locking member 14 (Fig. 3).

With regard to claim 2, the energy-absorption member is seen to have a column shape.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu et al (U.S. Pub. No. 2002/0070307) in view of Dybro et al (U.S. Pat. No. 5,511,739).

Hiramatsu et al is described above.

Hiramatsu et al does not disclose a cutter disposed on the stopper or locking member.

Dybro et al teaches providing a cutter 122 on a nut or stopper 90' that is arranged inside a seat belt retractor spool to move axially of the spool and absorb energy associated with unwinding of the belt when the spool is locked in an emergency.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Hiramatsu et al with a cutter on the stopper 16 to absorb energy during movement of the stopper as taught by Dybro et al in lieu of or addition to the energy-absorption member of Hiramatsu et al to reduce the number of parts

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required to accomplish the dual level energy absorption and load limiting function or to provide additional capacities or stages of energy-absorption.

With regard to claim 5, Dybro et al shows cutters 122 having acute angles (Figs. 6, 7) and it would have been obvious to an ordinary artisan to provide acute angles to form a sharp edge capable of cutting.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miller, III et al (U.S. Pat. No. 5,785,269) and Siegfried et al (U.S. Pat. No. 6,692,027) are cited to show seat belt retractors having plural energy absorption means. Lane, Jr. et al (U.S. Pat. No. 5,823,570) is cited to show a seat belt retractor having an energy absorption member that includes a cutter. Kohlndorfer et al (U.S. Pat. No. 5,967,441) is cited to show a retractor having a torsion bar and threaded, axially movable stopper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sjh
sjh
2/8/06

Kathy Matecki
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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600